

UC SANTA BARBARA

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Shuji Nakamura Named Winner of 2009 Harvey Prize

Lighting pioneer Shuji Nakamura of UC Santa Barbara has been named one of the two winners of the 2009 Harvey Prize for advancements in science and technology.

Awarded annually by the Technion – Israel Institute of Technology, which announced the winners this week, the prize will be presented at a ceremony on the university's campus in Haifa, Israel, on February 17. The other 2009 winner is Sir David Baulcombe, a botanist and research professor at the University of Cambridge in Britain.

Nakamura is a professor of materials in the College of Engineering at UCSB, where he also is co-director of the Solid State Lighting and Energy Center. He is internationally known for his invention of revolutionary new light sources: blue, green, and white light-emitting diodes and the blue laser diode. He and a UCSB team also developed the world's first nonpolar blue-violet laser diodes.

According to the prize announcement issued by the Technion, Nakamura was chosen for the Harvey Prize for "his seminal contributions to light sources based on nitride containing III-V semiconductors. Professor Nakamura pioneered the research that led to the first semiconductor laser producing blue emission, which increases significantly the density of optical storage devices. His work on nitride containing light emitting diodes led eventually to the white light LED, which totally revolutionized lighting concepts. These white light LEDs will dominate light-

producing systems, as they are significantly more efficient than conventional incandescent light bulbs, ensuring huge reductions in energy consumption."

Sir David was selected for "his seminal role in discovering the key function of short RNA molecules in regulating gene expression." His research has had a great influence on basic research in the life sciences, and a major impact on agriculture and biotechnology.

First awarded in 1972, the Harvey Prize includes a \$75,000 cash stipend to each winner. Supported by a fund established by the late Leo M. Harvey of Los Angeles, the prize recognizes individuals who have made great contributions to science and technology and human health, and individuals who have helped advance the cause of peace in the Middle East.

According to the Technion's announcement, 13 past winners of the Harvey Prize have gone on to win Nobel Prizes. They include David Gross, director of the Kavli Institute for Theoretical Physics at UC Santa Barbara, who won the Harvey Prize in 2000 and the Nobel Prize in Physics in 2004.

Nakamura has been the recipient of several other international awards in recognition of his pioneering research accomplishments. In 2006, he was awarded Finland's Millennium Technology Prize, and, in 2008, he won Spain's Prince of Asturias Award for Technical and Scientific Research. Earlier he was a recipient of Japan's Takeda Award as well as an Innovation Award from The Economist, a British magazine.

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